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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,731	07/28/2003	Kunihiro Akiyoshi	240554US2	3795
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER QIN, YIXING	
			ART UNIT 2625	PAPER NUMBER
			NOTIFICATION DATE 09/04/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/627,731	Applicant(s) AKIYOSHI ET AL.	
	Examiner Yixing Qin	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

In response to applicant's amendment received 6/7/08 all requested changes have been entered.

Response to Arguments

Applicant's arguments filed 6/7/08 have been fully considered. The previous 101 rejection has been withdrawn due to the new amendments to the claims.

The argument is that the Okubo reference is not concerned with updating individual APIs but rather individual programs. The examiner agrees on this point. However, upon further consideration, the Okubo reference still suggests the applicant's claimed invention. The Okubo invention is used to update or download image processing programs into a multifunction device. P[0081, 0082] discloses that version of the programs are stored and are used in deciding the updating process. One of ordinary skill would realize that these programs are tied to specific applications in the multifunction device in Okubo (see P[0020] – it “may be one of a printing application, a copying application, a facsimile application, and a filing application.” P[0024] discloses the updating of the image processing software according to an image processing application. Thus, Okubo is essentially updating a program specific to a particular image processing application. (see also P[0082]).

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The applicant's invention is updating APIs, which are also programs specific to particular applications. Still, they are programs designed with a particular function, which is to help applications communicate. The Okubo's programs are to enable the multifunction device to perform a particular function. However, the invention at hand is focused on updating version information. It just happens that Okubo is updating it for certain particular types of programs (image processing programs) while the claimed invention is for updating another type of program (APIs).

One of ordinary skill would realize that the Okubo invention can be simply modified to be able to handle additional types of programs to update. The reason is that the Okubo invention is more focused on the ability to obtain program versions (or even if the program exists) and updating the program version (or downloading a program). Thus, under the KSR rationale, this would be a simple substitution of one known element for another to yield predictable results. That is, one of ordinary skill would see that this version identification and updating invention of Okubo can be altered to accept different types of programs and yield predictable results because it is basically looking at number or information from a table (or any other information source) about a program and updating or downloading based upon that information. In this particular case, image processing programs can be substituted by APIs because both are, at their core, programs with versions. The particular function of the programs are not as important as the ability to obtain their version and to update them.

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The claims have been amended and their scope changed, so the previous 102 rejection have been withdrawn in favor of a 103 rejection over Okubo.

Please see the rejection below for more detail.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-23 rejected under 35 U.S.C. 102(e) as being anticipated by Okubo (U.S. PG Pub. No. 2003/0058471).

Regarding claims 1, 10, 19, 25, Okubo discloses an image forming apparatus including an application for performing processes on image forming, and a system service for performing processes of a system side of the image forming apparatus on the basis of a request by using an API from the application, the image forming apparatus comprising:

Okubo does not explicitly discloses "an obtaining unit configured to obtain version information of a plurality of APIs used by the application for the system service, and version information a plurality of APIs corresponding the system service ;

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a comparing unit configured to compare, API by API, version information of the one of the plurality of the APIs used by the application with version information of the one of the plurality of APIs of the system service.”

However, Okubo discloses in P[0082, 0085] a way to check version information of image processing programs. P[0086] shows that the downloader of the image processing apparatus queries the server for the versions of the programs. P[0086], Fig. 4 – steps S3-S8 discloses that programs are determined if they are newer and downloaded for updating. Basically, Okubo discloses the same unit/steps for getting version information and updating, but simply for image processing programs as opposed to APIs. Again, see the arguments above that the usage of APIs would simply be a substitution of one type of program for another. This would yield predictable results (i.e. APIs can be upgraded just like image processing programs if the Okubo invention were to look at version of APIs to update)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have been able to update APIs.

The motivation would have been to apply a known technique updating programs to be able to update more types of programs.

Therefore, it would have been obvious to alter or improve Okubo to obtain the invention as specified.

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Regarding claims 2, 11, 20, Okubo discloses the image forming apparatus as claimed in claim 1, further comprising a further for comparing unit configured to compare a version of a set of the APIs used by the application with a version of a set of APIs of the system service, wherein the image forming apparatus performs comparison by the comparing unit only when the versions of the sets of the APIs are different. (P[0024] – the enhancing mechanism checks software sets for which functions are available to a MFP and to update or download new versions of programs)

Regarding claims 3, 12, 21, Okubo discloses version control for an MFP.

It does not explicitly disclose “wherein an executive program of the application includes the version information of the APIs used by the application, and the obtaining unit obtains the version information of the APIs used by the application from the application.”

However, Okubo discloses in P[0082, 0085] that version information is stored in the property manager 37 in association with their names. Although this is not explicitly disclosed as an executable, it provides the system information regarding the versions of the programs contained in the image processing apparatus.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used an alternate representation of version information.

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The motivation would have been to allow organization of information of programs in an image processing apparatus.

Therefore, it would have been obvious to alter Okubo's invention to obtain the invention as specified.

Regarding claims 4, 13, Okubo discloses the image forming apparatus as claimed in claim 3, wherein the image forming apparatus tentatively launches the application for obtaining the version information from the application. (Okubo discloses obtaining information from the program property manager. However, software executables are known to have version information associated with them, so this would simply be using another known technique to obtain information that is represented in another way in the Okubo reference.)

Regarding claims 5, 14, Okubo discloses the image forming apparatus as claimed in claim 3, wherein the system service includes a plurality of system service modules, the application includes version information of APIs used by the application for each of the system service modules, when the obtaining unit obtains version information of APIs corresponding to a system service module from the application, the obtaining unit obtains version information of APIs of the system service module from the system service module. (P[0080] discloses obtaining version information of programs from the server 7 for the various programs, which read upon the service modules).

Regarding claims 6, 15, 22, Okubo discloses the image forming apparatus as claimed in claim 1, further comprising a file storing the version information of the APIs used by the application, wherein the obtaining unit obtains the version information of the APIs used by the application from the file. (P[0082, 0085] that version information is stored in the property manager 37 in association with their names.)

Regarding claims 7, 16, 23, Okubo discloses the image forming apparatus as claimed in claim 1, wherein, when the comparing unit compares the versions before the application is installed, the image forming apparatus displays on an operation panel information indicating that the application can be installed if all versions of the APIs used by the application are the same as versions of corresponding APIs of the system service. (P[0087] and Fig. 4, s6 - > "NO", shows that programs that are up to date do not need to be updated. While it does not show this on a control panel, the display of information is well known. As disclosed in P[0111], there is display for a different kind of message, so potentially other messages can also be displayed, such as showing a user that a program is not to be updated)

Regarding claims 8, 17, Okubo discloses the image forming apparatus as claimed in claim 1, further comprising:

control services configured to control hardware resources of the image forming apparatus, (abstract – enhancement control mechanism) and

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a virtual application service that operates as a client process for at least a control service, and operates as a server process for the application, (Fig. 1, item 18, function enhance unit)

wherein the system service includes at least a control service that receives a request by using an API from the application, and the virtual application service. (P[0077])

Regarding claims 9, 18, Okubo discloses the image forming apparatus as claimed in claim 8, wherein the virtual application service includes the obtaining unit and the comparing unit. (Fig. 1, items 18, 19, Fig. 4)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yixing Qin whose telephone number is (571)272-7381. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YQ

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/Twyler L. Haskins/

Supervisory Patent Examiner, Art Unit 2625